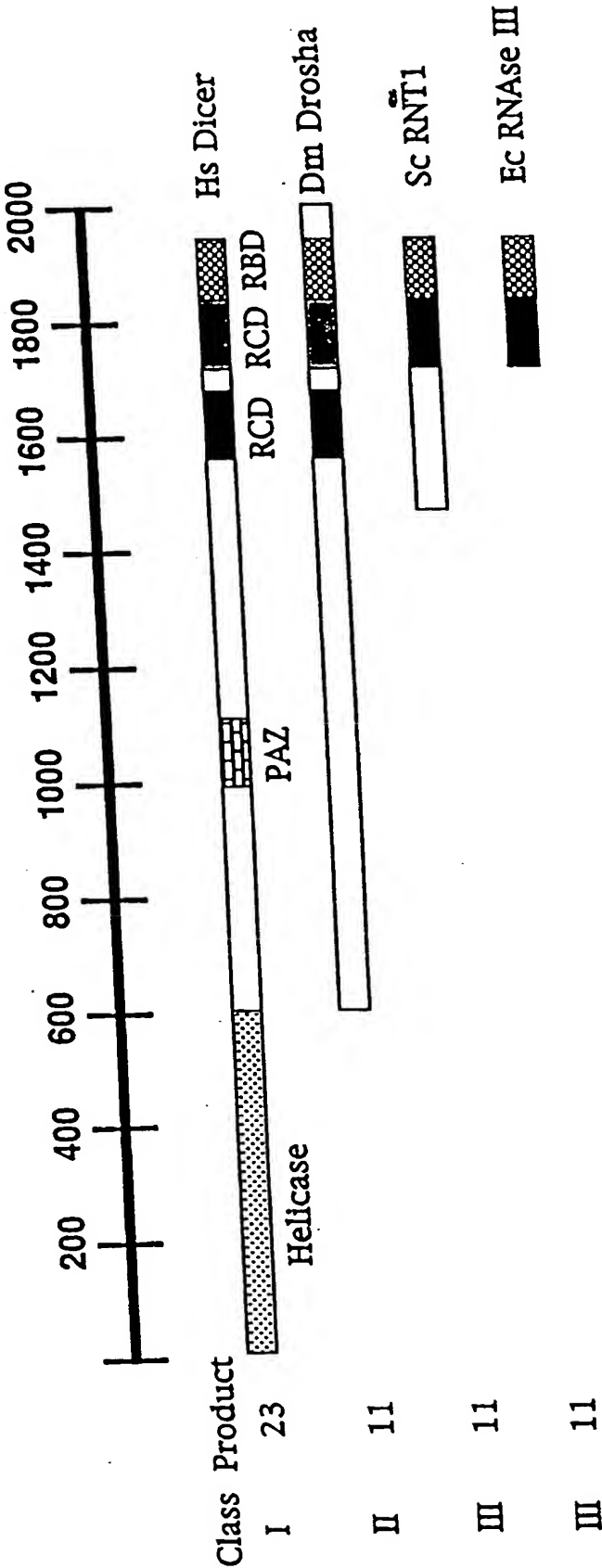


Figure 1

RNAse III class proteins



RCD - RNAse III RNA cleavage domain
RBD - RNAse III dsRNA binding domain

Structure, 9, p. 1225, (2001)

1	(SEQ ID NO:3)	Pasteurella multocida
1	(SEQ ID NO:10)	H. Influenzae
1	(SEQ ID NO:11)	S. typhimurium
1	(SEQ ID NO:12)	E. coli
1	(SEQ ID NO:13)	V. cholerae
1	(SEQ ID NO:14)	P. aeruginosa
1	(SEQ ID NO:15)	H. pylori
1	(SEQ ID NO:16)	S. pyogenes
1	(SEQ ID NO:17)	S. pneumoniae
1	(SEQ ID NO:18)	B. subtilis
1	(SEQ ID NO:19)	S. aureus
1	(SEQ ID NO:20)	Borrelia burgdorferi
1	(SEQ ID NO:21)	M. leprae
1	(SEQ ID NO:22)	Aquifex aeolicus
1	(SEQ ID NO:23)	Rickettsia conorii
1	(SEQ ID NO:24)	A. tumefaciens
171	(SEQ ID NO:25)	C. cerevisiae

[illegible]

Figure 2

Figure 3

RNAse Activity of E38A

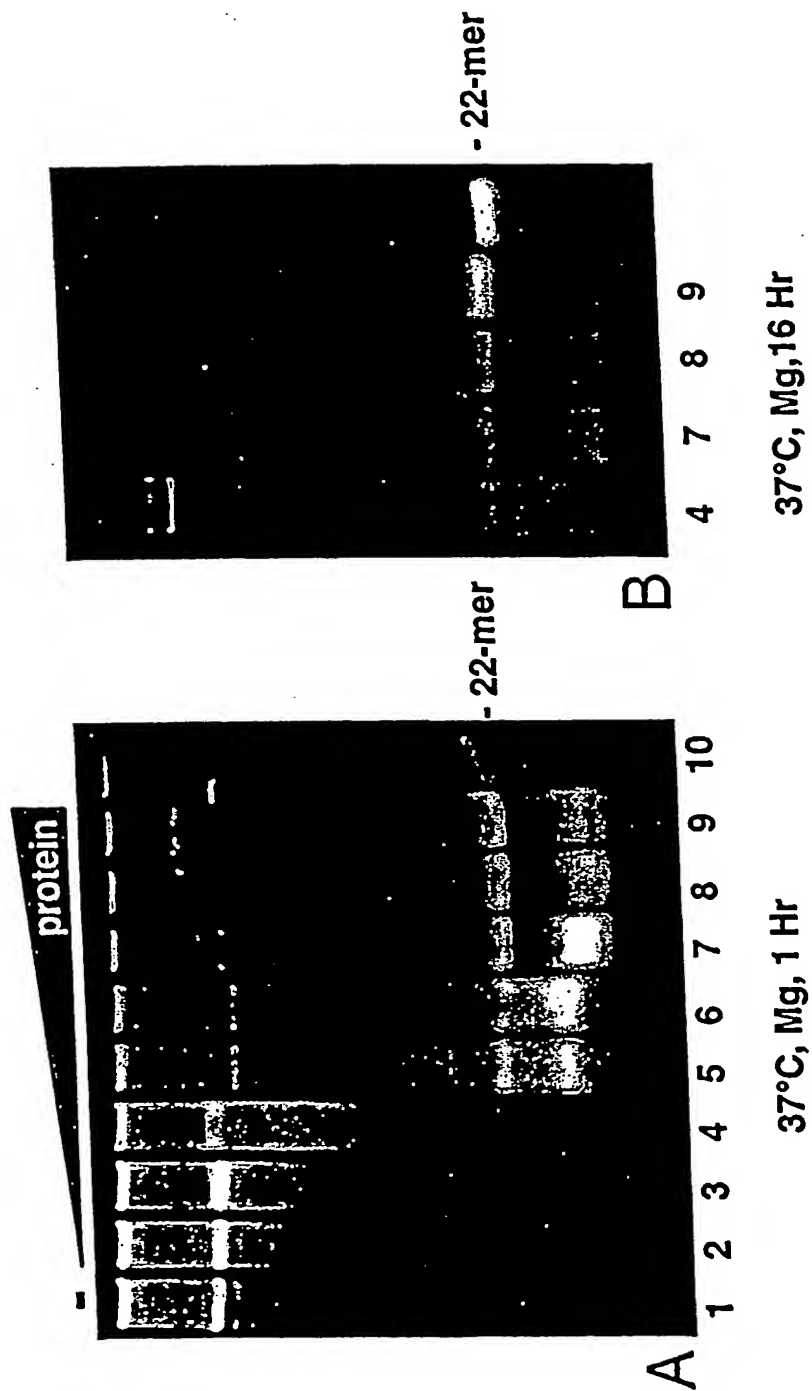


Figure 4 RNAse Activity of E38A

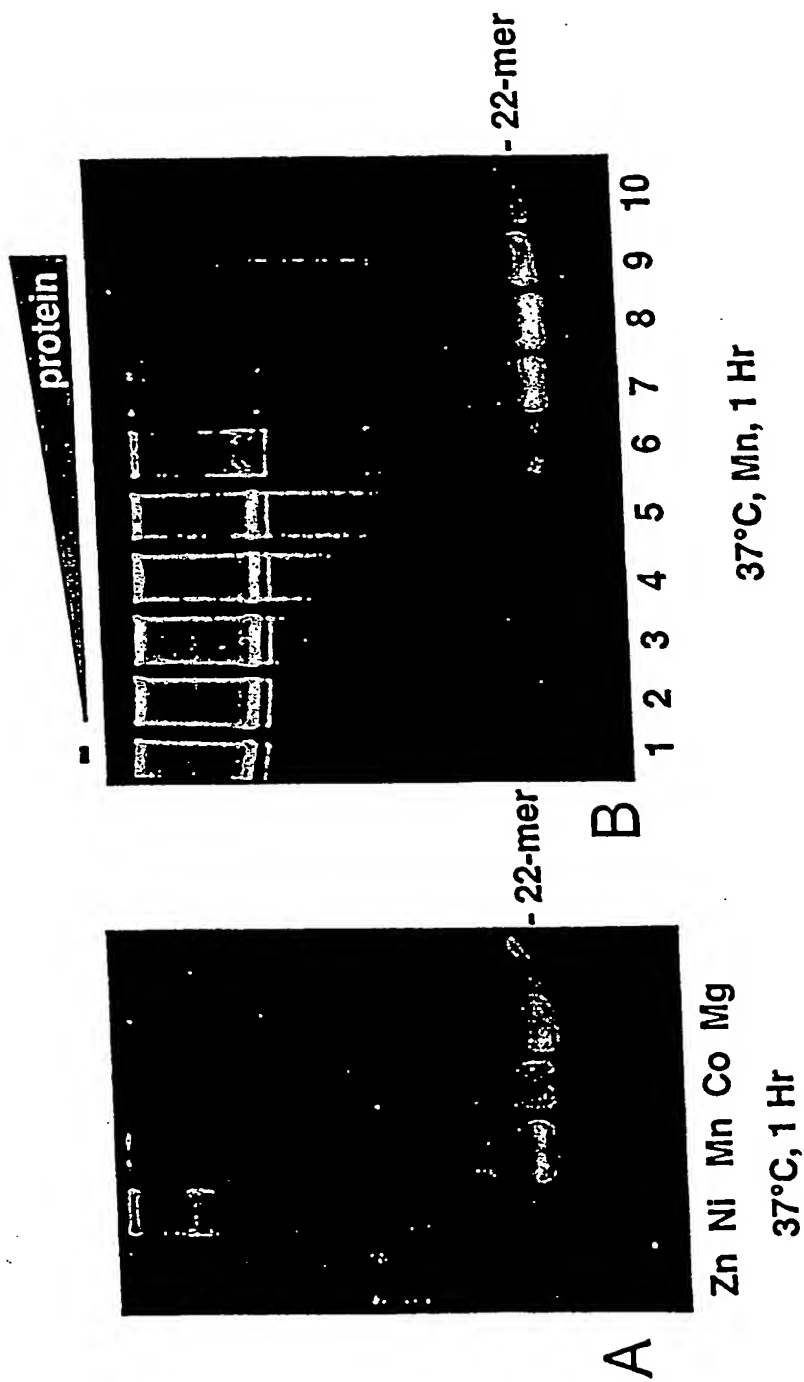


Figure 5
RNase Activity of E38A

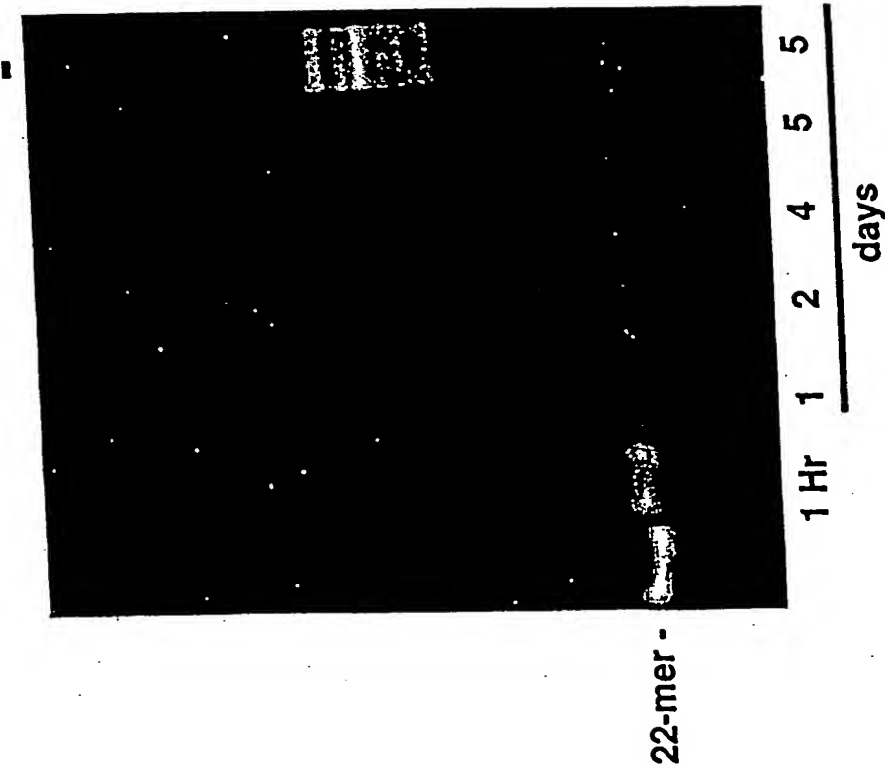


Figure 6
RNase Activity of E38A

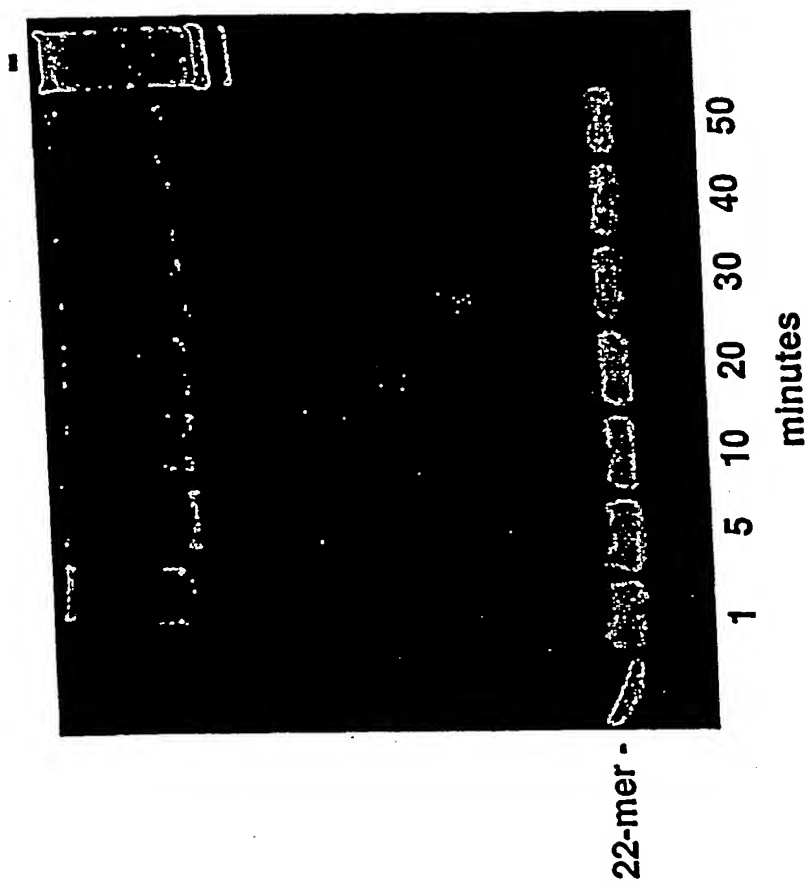


Figure 7
RNase Activity of E38A

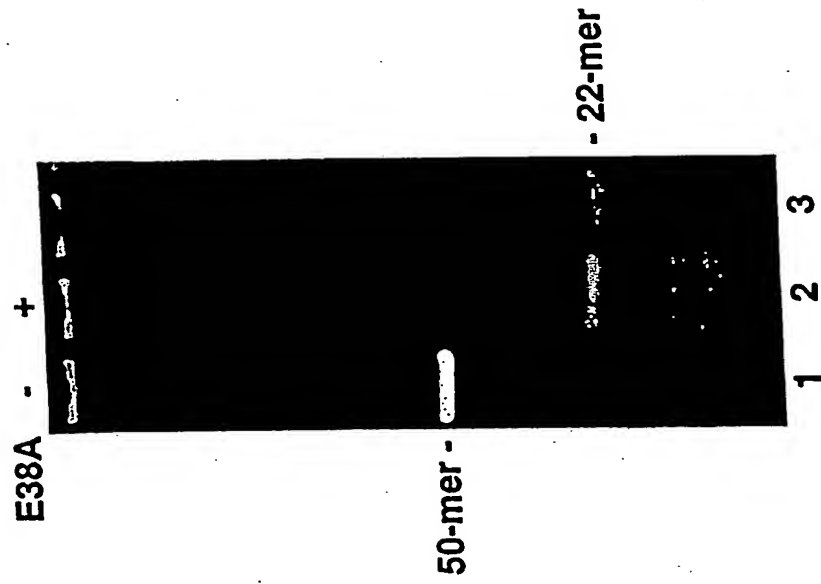


Figure 8

Comparisons

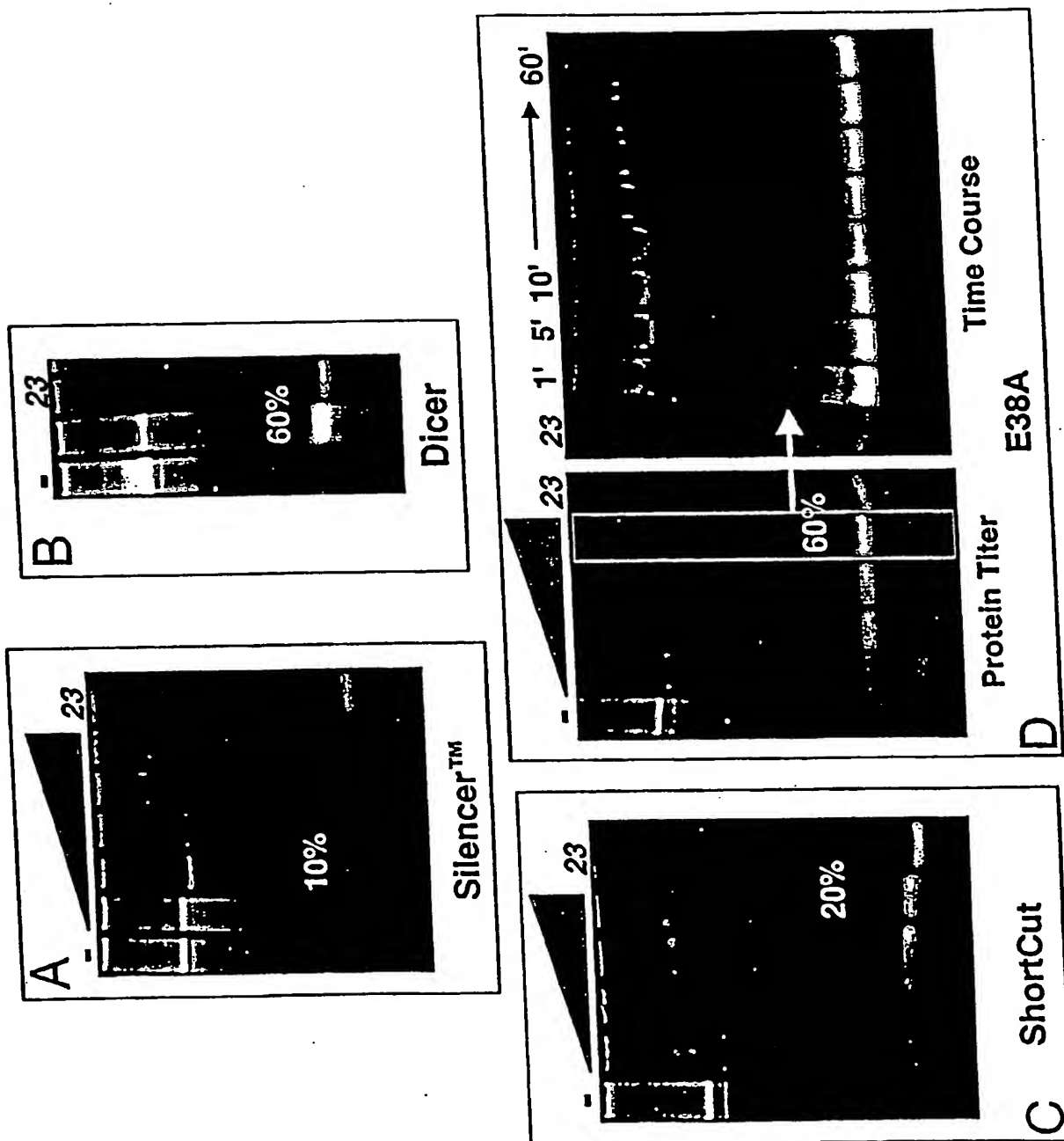
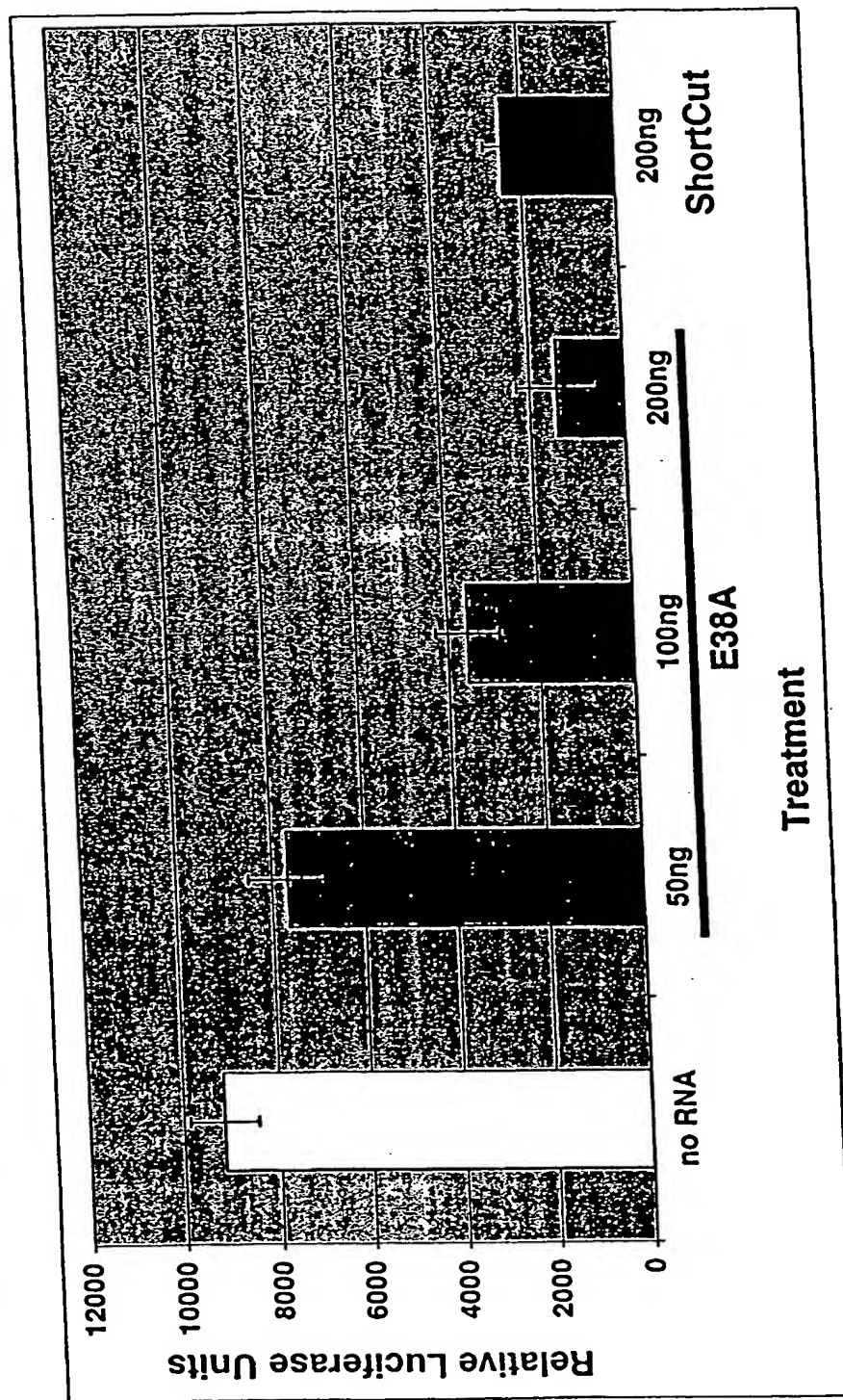


Figure 9
RNAi activity of E38A-cleaved dsRNA



Luciferase activity in transfected NIH 3T3 cells

Figure 11 RNAse Activity of E38T & E38W

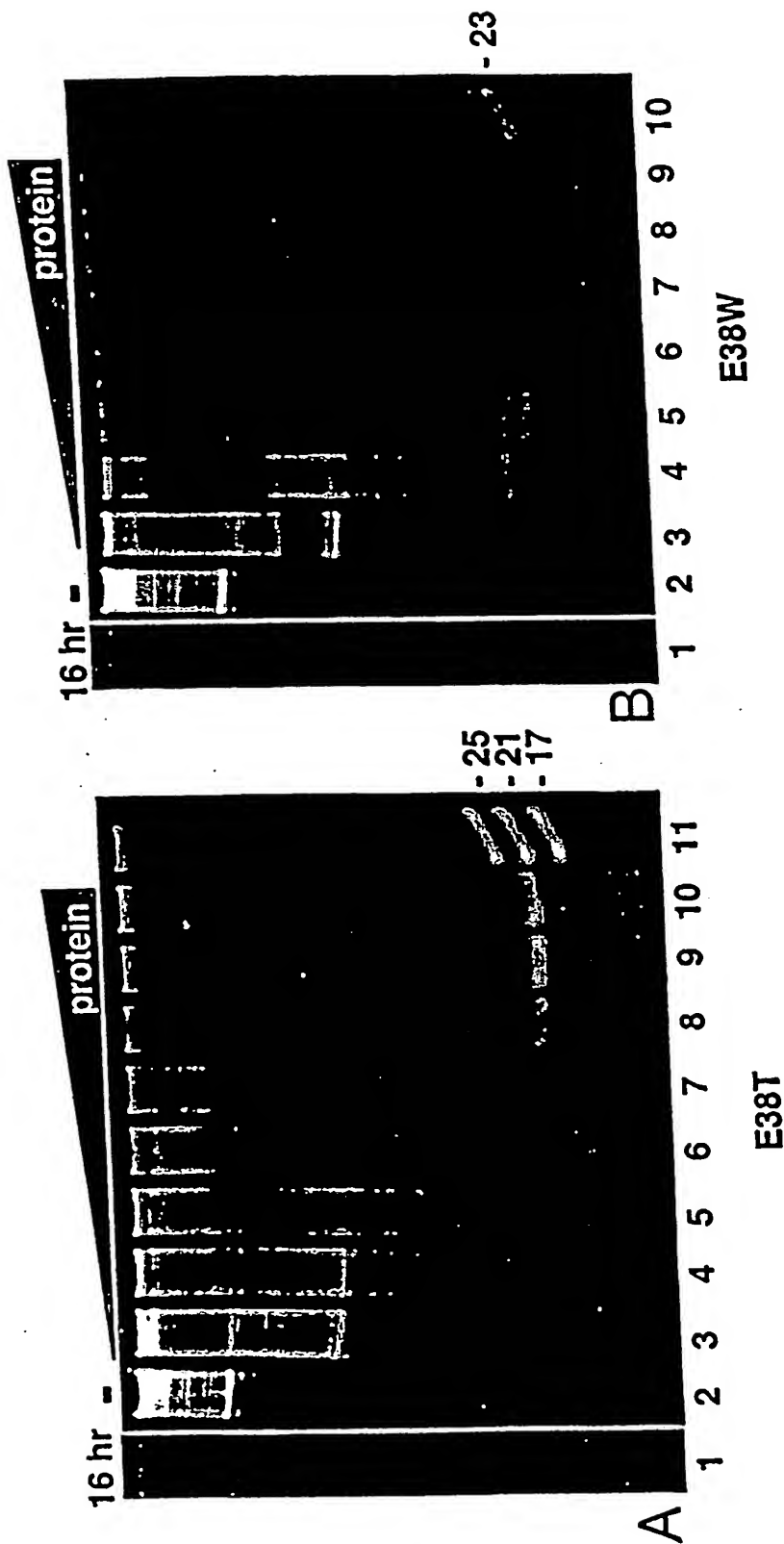


Figure 12

E. coli RNase III Mutants

<i>Aquifex aeolicus</i>	wt	37	ETLEFLGDA	63	REGFLS	107	DVFEAL
<i>E. coli</i>							
E38D	wt	38	ERLEFLGDS	64	DEGDMS	114	DTVEAL
E38K	wt	38	DRLEFLGDS	64	DEGDMS	114	DTVEAL
E38Q	wt	38	KRLEFLGDS	64	DEGDMS	114	DTVEAL
E38P	wt	38	QRLEFLGDS	64	DEGDMS	114	DTVEAL
E38V	wt	38	PRLEFLGDS	64	DEGDMS	114	DTVEAL
E38A	23	38	VRLEFLGDS	64	DEGDMS	114	DTVEAL
E38T	23	38	ARLEFLGDS	64	DEGDMS	114	DTVEAL
E38W	23	38	TRLEFLGDS	64	DEGDMS	114	DTVEAL
		38	WRLEFLGDS	64	DEGDMS	114	DTVEAL
D45V	wt	38	ERLEFLGVS	64	DEGDMS	114	DTVEAL
D45A	i	38	ERLEFLGAS	64	DEGDMS	114	DTVEAL
E65P	wt	38	ERLEFLGDS	64	DPGDMS	114	DTVEAL
E65A	23	38	ERLEFLGDS	64	DAPGDMS	114	DTVEAL
E117D	i	38	ERLEFLGDS	64	DEGDMS	114	DTVEAL
E38Q,E65P	wt	38	QRLEFLGDS	64	DPGDMS	114	DTVEAL
E38A,E65A	wt	38	ARLEFLGDS	64	DAPGDMS	114	DTVEAL

Figure 13
E117D, E38A mixtures produce multimers of
23 bp product

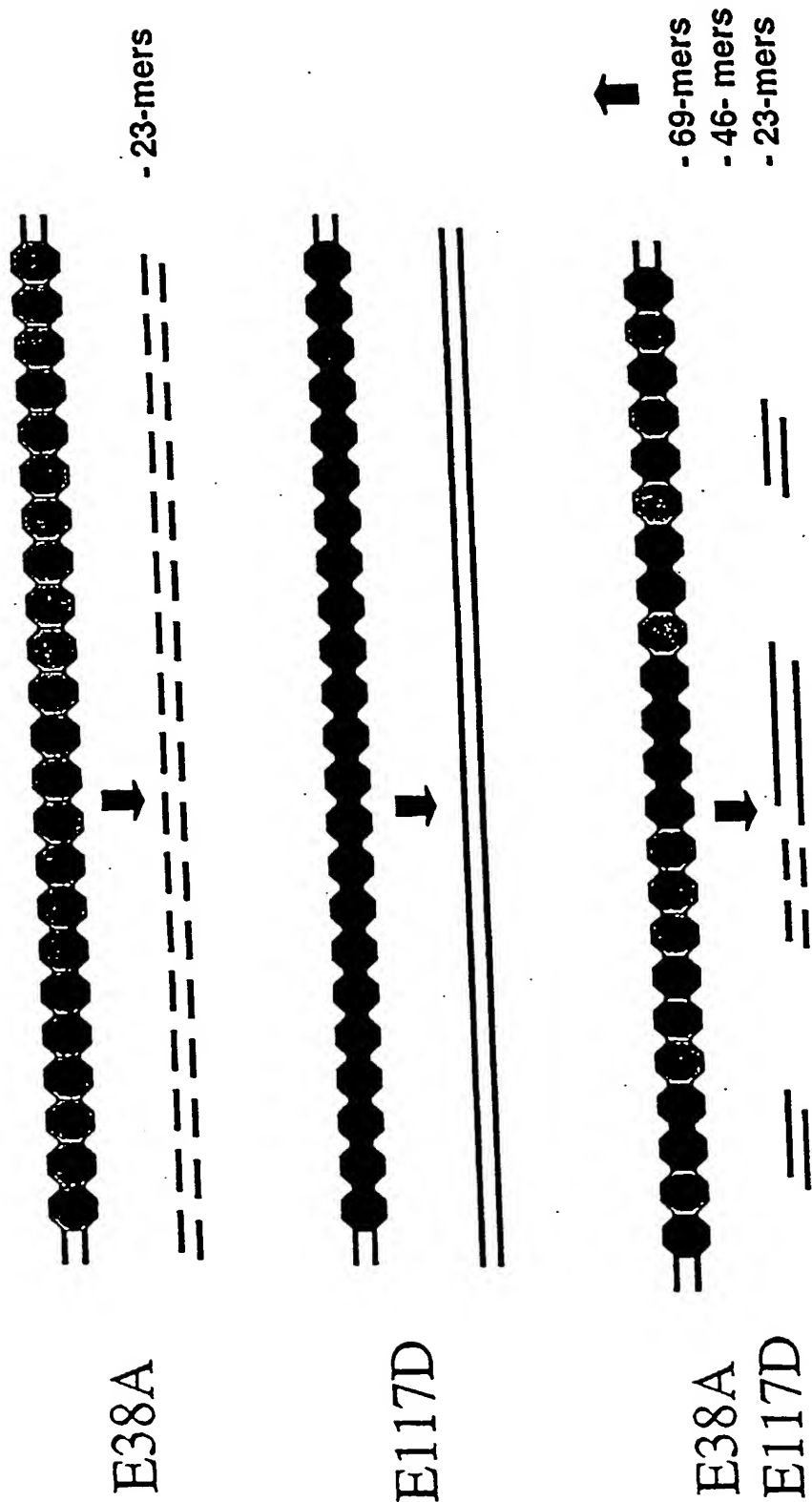


Figure 14
E117D, E38A mixtures produce multimers of
23 bp product

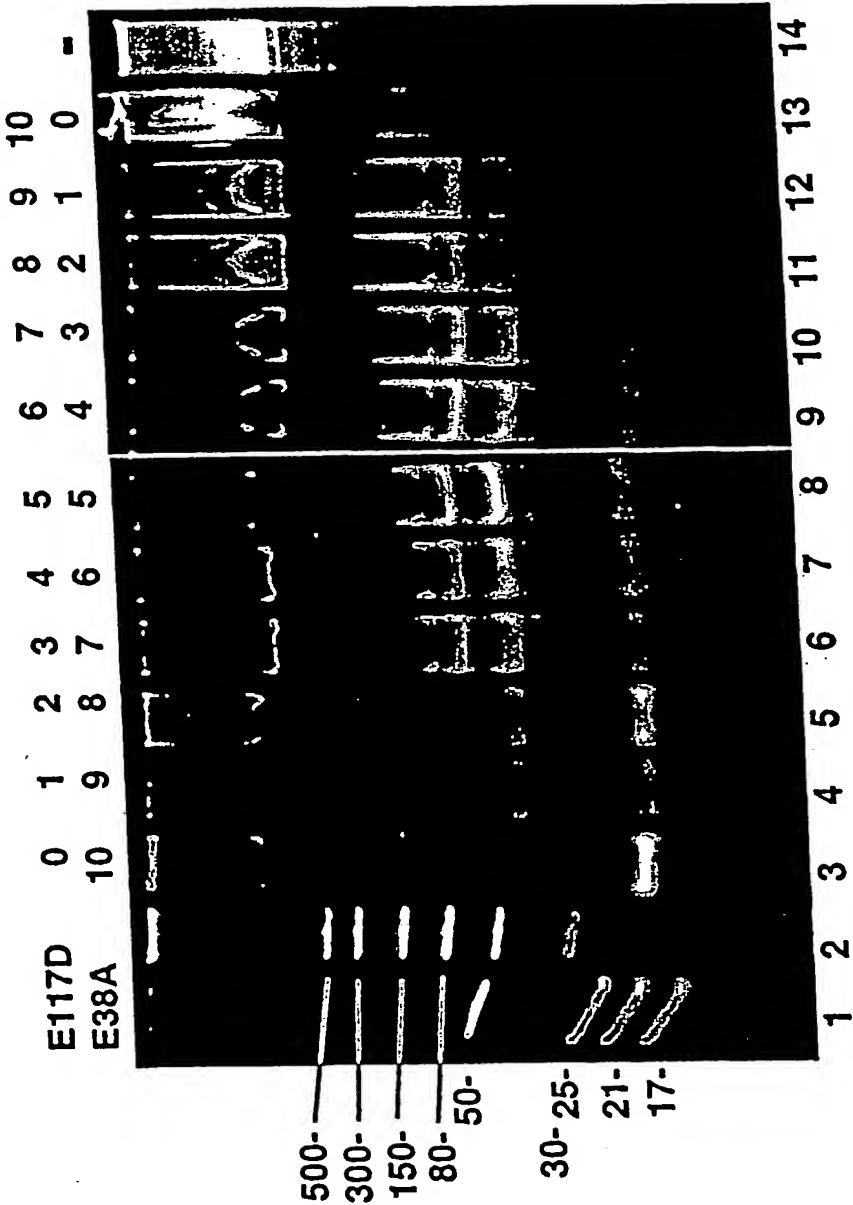


Figure 15
E117D, WT mixtures produce multimers of 23 bp product

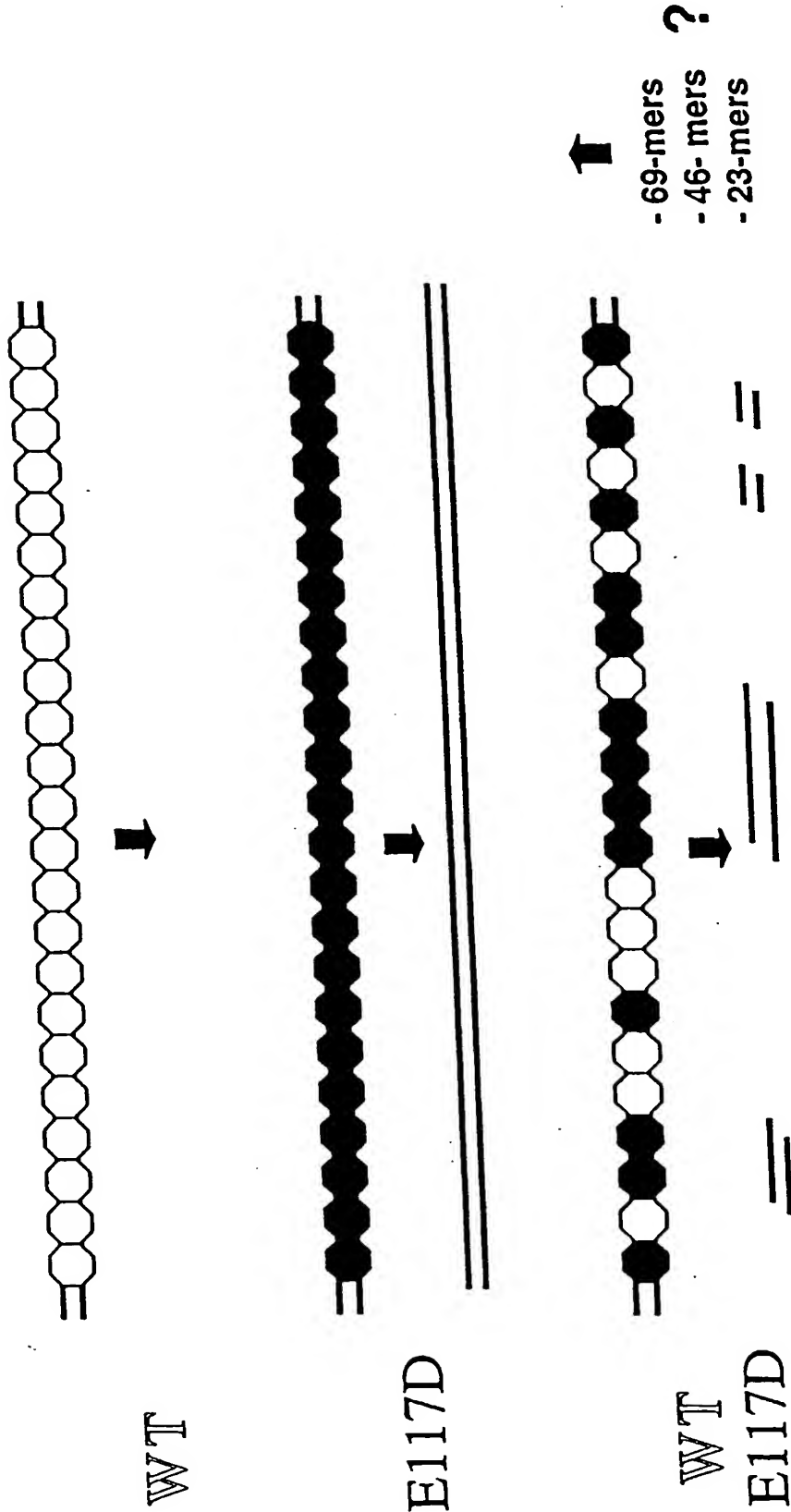
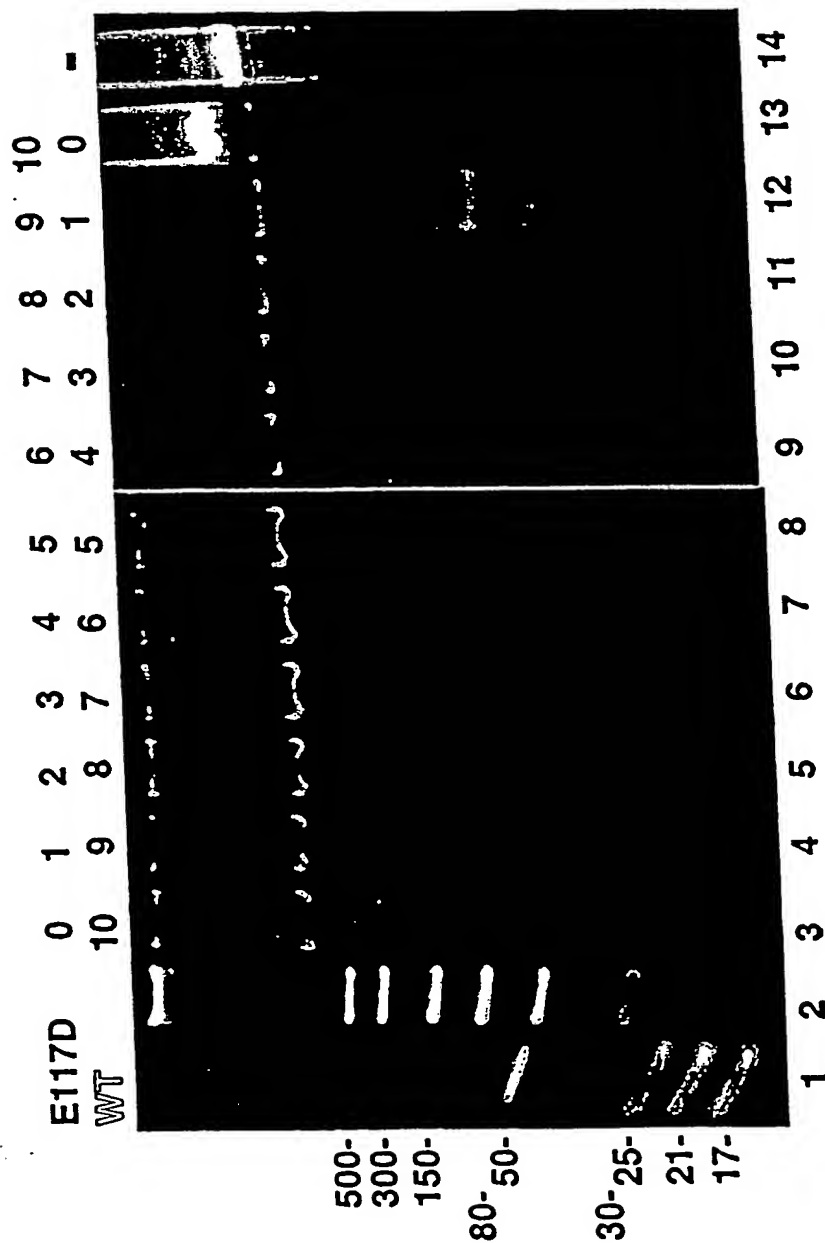


Figure 16
E117D, WT mixtures produce multimers of
23 bp product



siRNA evaluation tool (EXPERIMENTAL) v0.57 results - Thu Jan 13 15:59:54
2005

Query: Homo sapiens tumor protein p53 (Li-Fraumeni syndrome)
NM_000546 (TP53), mRNA.
Query Length: 2629 nt
**Displayed
Region:** 1 - 2608
**Database
Searched:** Homo_sapiens -- NCBI :: hs.fna
**Min Match
Length:** 21 nt

Hits to the following DB sequences were filtered out of the results (user
cutoff 1.0E-70):
gi|8400737|ref|NM_000546.2| E-val:0.0

Current resolution is 4 base(s).

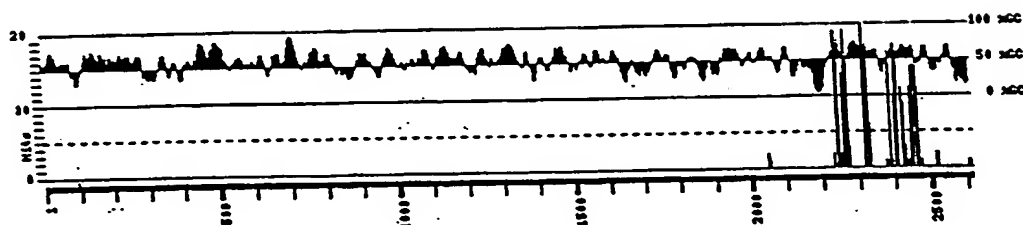


Figure 17

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

☐ BLACK BORDERS

☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES

☒ FADED TEXT OR DRAWING

☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING

☐ SKEWED/SLANTED IMAGES

☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS

☐ GRAY SCALE DOCUMENTS

☐ LINES OR MARKS ON ORIGINAL DOCUMENT

☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY

☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.